Massachusetts Department of Environmental Protection

Instructions for completing the 2007 Public Water Supply Annual Statistical Report for Community (COM) systems not using 100,000 gallons per day or more.

The following are instructions for completing the MassDEP Public Water Supply Annual Statistical Report (ASR). These instructions and blank electronic versions of the ASR are available from MassDEP's website at http://www.mass.gov/dep/water/approvals/dwsforms.htm

Section A Certification

Name of Certifying Person:

Generally this is the person responsible for the operation of the PWS and is responsible for completing the ASR. It may be a water department superintendent, chairperson of the water board, or the Primary Certified Operator. Provide name, title, phone number, and fax number. The certifying person is required to sign and date the form.

Section B Public Water Supply Information

Review the Comprehensive Report that was enclosed with the copy of this ASR mailed to you to check for accuracy. If there are changes to the Comprehensive Report mark the changes and highlight them.

1. Provide the PWS mailing address, phone number and fax number (if available) for the legally responsible party. Provide the Web address of the PWS, if available.

2. Provide the name of the owner of the PWS, if the PWS is other than a municipal supply. For municipal supplies, leave blank (assumed to be the same as #1 above).

3. Provide the name, phone number and email address of the primary contact for the PWS.

4. Provide the names, grades, license numbers and status of the system operators.

5. Provide the name, phone number, E-mail address and mailing address of the system primary operator.

6. Self-explanatory.

7. If applicable, provide the names and phone numbers of the members of the governing body of the PWS. Attach additional sheets if necessary.

8. Provide the Federal Identification Number (FEIN).

9. Self-explanatory.

10. Population Served: Include the population served, whether or not a change has occurred. This is generally the residential population served by your PWS. Use the most recent census data available. Often, this is a local census available from town or city government.

11. Distribution Meter Information:

    a. Percentage of distribution system metered: This is the percentage of the water system service connections that are metered. For example if there are 400 service connections and 20 do not have meters (municipal buildings, schools, etc.), then the system is 95% metered (380/400 x 100). If every service connection is metered, then the system is 100% metered.

    b. Are all publicly owned buildings metered? Answer "yes" only if all public buildings (schools, police stations, fire stations, etc.) are metered.

c. If No, what percent are? Enter the percentage of service connections to public buildings (including schools) that are metered. If there are 20 service connections to public buildings, and 15 have meters, then 75% of public buildings are metered (15/20 x 100).

12. System Information

a. Number of Service Connections: This is the total number of connections to the distribution system through which water can be obtained (other than hydrants). It includes metered and unmetered connections, public and private connections, and year-round and seasonally used connections.

b. Percentage of Source Types: This is the percent of each source of raw water obtained for the system. Together the four types of source water (Ground, Surface, Purchased Ground and Purchased Surface) must add to 100% of the total raw water.

c. Finished Water Storage Capacity (MG): This is the total volume capacity of water tanks in your system, in millions of gallons.

Example: There are three tanks in your system, with capacities of 1,500,000 gallons, 2,000,000 gallons, and 750,000 gallons.

The total storage capacity = 1,500,000 + 2,000,000 + 750,000 = 4,250,000 gallons

4,250,000 gallons/1,000,000 = 4.25 MG

13. Emergency Response Actions:

a. Indicate that you have an Emergency Response Plan (ERP) for your system. Do not attach your ERP to the ASR. Your ERP will be reviewed during your next sanitary survey. Also indicate whether or not you have made changes to your ERP. If you did make changes, attach copies of the ERP changes to the ASR.

b. Indicate whether or not you have an Emergency Response (ER) annual training plan. If you do, attach a copy of the training plan and a description of the reporting year's training, including types of training, date(s) of training, and number of staff and local official trained and their titles.

c. Indicate whether or not your system is registered for the Health and Homeland Alert Network (HHAN).

d. Indicate whether or not your system has joined the Massachusetts Water and Wastewater Agency Response Network.

e. Indicate how often your system tests all alarms, interlocks and back-up power sources.

f. List all Level 3 or higher ER incidents during the reporting period.

14. Attach an updated Emergency Response Plan Directory to the ASR.

15. Do you have antennae or other appurtenance attached to your storage tank(s)?: Check either yes or no. Antennae or Appurtenance: may include cell phone transmitters and receivers, and/or police, fire or other municipal communication equipment that is attached to your storage tank(s).

Section C Cross Connection Control Program (CCCP)

1. Provide the name, telephone number and address of your cross-connection control coordinator.
2. Provide the name, license number, phone number and address of the surveyor responsible for cross-connection design sheets and plans.
3. Indicate whether or not you have surveyed all commercial, industrial, institutional and municipal facilities in your service area for cross-connections. If yes, provide the date the survey was completed. If no, provide the date you expect the survey to be completed.
4. Check the appropriate boxes to indicate whether or not your system is protected by either Reduced Pressure Backflow Preventers (RPBPs) or by Double Check Valve Assemblies (DCVAs). If the answer is "yes" to either, proceed to question 5 (Table C1). If the answer to both is "No" then proceed to question No. 13.
5. **Table C1 Summary of Facilities Surveyed** For each type of facility (commercial, industrial, institutional, municipal) provide the number of facilities served by the PWS and the total number of facilities surveyed since the inception of your CCCP. To obtain "the number of facilities remaining to be surveyed", subtract facilities surveyed to date from the total number of facilities. In the last column, provide the number of facilities surveyed during 2007.
6. **Table C2 Summary of Installed Devices and Assemblies** Attach a list of ALL registered cross-connections that are being protected by an RPBP or DCVA. The list must contain at a minimum the following information: owner/business name, Cross Connection ID#, type of protection (RPBP or DCVA), brand, model, serial # and exact location within the facility.
7. **Table C3 Backflow Preventer Testing Program Summary** Summarize the number of initial tests, routine tests, failures, repairs and re-tests for both RPBPs and DCVAs performed in the reporting year.
8. Indicate the maximum amount of time you allow to protect a cross-connection once it is discovered.
9. Indicate whether or not you have fully implemented cross-connection education program for residential customers.
10. Indicate whether or not you have fully implemented cross-connection education program for industrial, commercial, institutional and municipal users. If yes, indicate which types of users are targeted by your education program.
11. Indicate whether or not you have an atmospheric vacuum breaker program for your customers. These are for protecting garden hose bib connections, usually on the sides of buildings. If you do not have a program, indicate if you plan on instituting one in the future.
12. Indicate if you have a local ordinance, bylaw or policy statement for cross-connection control.
13. Indicate whether or not your water system has a containment policy. A containment policy means that ALL service connections have a cross-connection control device at the meter to isolate each facility independently of its activity. To answer "Yes" ALL service connections in your system must have a device at the meter.
14. Indicate whether or not your system used the service of a contractor or consultant to implement all or part of your cross-connection control program. If "Yes", provide their names, MassDEP Certification IDs and Certification expiration dates.

15. Indicate if there was a cross-connection incident in your water system during the reporting year. If "Yes", provide the date, location, and description.

Section D Water Production & Consumption Information

Under Federal Safe Drinking Water Act regulations, MassDEP is required to collect data on finished water volumes produced by public water suppliers

Table D1 FINISHED Water Production and Consumption Summary for Last Year (2007):
All PWSs will complete Table D1. The volumes of water listed in Table D1 are the finished water volumes pumped from your sources after treatment (if any) and/or purchased (if any) and/or sold to another system (if any). For groundwater sources where treatment is limited and does not result in a reduction in volume (e.g. adding chemicals for corrosion control or disinfection) the volume of raw water pumped from the wells will be the same as the finished water available to the system

Maximum Daily Consumption: This is the highest one-day volume of raw water pumped in one day during the calendar year. Include the date on which this occurred.

Summary of Water Purchased or Sold: Summary of water purchased from other systems or sold to other systems. Include the name(s), PWS ID(s) and volumes of water purchased or sold.

Table D2 Metered Finished Water Consumption by Service Type

The following are descriptions of the various categories of service types. Under the Safe Drinking Water Act, the U.S. EPA requires MassDEP to collect and report water use data in these categories.

Day Care Center: This includes facilities for the care of children that are not educational facilities. These facilities are generally for taking care of young children during business hours while parents are working.

Dispenser: These facilities sell water retail to individual customers. This includes retail water-dispensing kiosks where customers fill water bottles.

Homeowners Association: This is when one service connection and meter serves an entire condominium association building. If each condo within a complex has its own meter, then include them in the Residential Area category. This category also includes one service connection to a group of detached, single or multi-family homes that are part of a homeowners association with common property, maintenance fees, etc.

Hotel/Motel: Provide overnight rooms at a daily rate, including bed & breakfast facilities.

Highway Rest Area: Includes service areas on limited access highways with restroom facilities. Restaurants operating at the rest area would be included in the restaurant category if metered separately.

Industrial/Agricultural: This includes services that provide water primarily for industrial processes or manufacturing, including factories and electric power plants. Water for growing fruits and vegetables for human consumption, water for raising animal feed such as corn, water used for animal husbandry, and water used for wholesale or retail nurseries.
Interstate Carrier: These are bulk carriers that truck water across state lines for use as public drinking water.

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Institutions (prisons, mental facilities, nursing & rest homes, universities, colleges, dormitories): Includes service connections to facilities that house large numbers of people for extended periods of time in a group setting without separate household quarters. This includes boarding schools and colleges and universities with dormitories

Medical Facility: This includes hospitals, rehabilitation centers, clinics, and doctors' offices.

Mobile Home Park (non-primary residence): These service connections are generally to mobile homes in mobile home parks that are used seasonally, on weekends, or otherwise not used by their occupants as their primary residence. These service connections would be expected to be used cumulatively less than six months during the year.

Mobile Home Park (principal residence): This category is for mobile home parks used as principal, year-round residences by the occupants. Single mobile homes that are not part of a mobile home park should be included in the Residential Area category.

Municipality: These are metered services providing water to a municipal building, park, playing field or other use. This category does not include public K-12 schools. Schools are included in schools (K-12) under Non-Residential Institutional. Non-metered municipal uses such as hydrant flushing and street cleaning are not included here.

Other Area: Include any metered uses not included in the above categories.

Other Non-Transient Area: This includes other water service types that do not fit into the above categories. Provide a description of the service type.

Other Residential Area: Include other residential service connections that do not fit into the above categories. If you use this category, provide a description of the facility.

Other Transient Area: This category includes office buildings and other workplaces that do not provide retail services to customers. It also includes campgrounds and RV parks.

Recreational: These are commercial entities in which most of the water is used for other than human consumption such as golf courses, ski areas and water parks.

Residential Area: These are service connections to single-family homes, multi-family homes and apartment buildings. Most residential service connections in Massachusetts are going to fall in this category, and many PWSs will have all their residential service connections under this category.

Restaurant: This includes fast-food restaurants, take-out only restaurants, seasonal restaurants such as ice-cream stands, diners, coffee shops, and sit-down restaurants with table service.

Retail: This category includes stores and other retail outlets that sell products and services to customers. This includes food and non-food stores, beauty shops, post offices, movie theaters, etc.

Schools (includes K-12): This includes all public and private schools that do not have residence halls. It would include higher education institutions such as community colleges that do not have dormitories. It does not include boarding schools, which would go in the "Institutions" category under Residential service types.

Sanitary Improvement Area: Refers to districts in the central U.S.

Summer Camp: Children stay at these facilities, either during daylight hours or overnight, for one or more weeks during the summer only.

Secondary Residences: These service connections are generally to residences that are used seasonally, on weekends, or otherwise not used by their occupants as their primary residence. These service connections would be expected to be used cumulatively less than six months during the year. This would include lake or beach camps, hunting camps, ski condos, etc.

Service Station: These facilities sell retail gasoline and may or may not also provide mechanic services. This category includes convenience stores that sell retail gasoline and auto repair shops that do not sell gasoline.

Water Bottler: These are facilities that bottle water for distribution to retailers. This includes water bottled for sale in stores, generally in one gallon or smaller containers, and water bottled for water coolers, generally in five-gallon containers.

Wholesaler: This includes entities that sell water in large quantities, for example trucking companies that sell tanker trucks of water to fill swimming pools, for construction sites, etc. This may also include hydro-seeding companies that fill their trucks from hydrants, if this use is metered.

Section E Individual Source Statistics

This section summarizes the monthly pumping of raw or finished water from each source that the PWS operates. Regulations require sources of water to be metered. The volumes reported in Section E are the volumes measured with the source meters.

Table E1 Individual Water Source Statistics

Source Name, PWS Source ID # and Source Watershed: Source Name is the common name such as Main Street Well No. 1 for a groundwater well or Adams Pond for a surface water intake. PWS Source ID # is the MassDEP-issued number for each source such as 1029000-03G where 1029000 is the PWS ID and -03G designates that it is the third groundwater source of that PWS. Source watershed is one of the 27 major Massachusetts watersheds within which the source is located such as Neponset, Charles or Connecticut. The source watershed is not the name of the local sub-basin such as Beaver Brook or Mill River.

Source Availability:

Active Source (Formerly: Permanent, Backup, Seasonal, Provisional, Interim): an approved source(s), monitored and maintained to meet 310 CMR 22.00 and used for primary or backup purposes to meet consumer demand as necessary.

Inactive Source (Other, contaminated): an approved source(s), which is expected to be off-line for at least one year (12 months). A source may be deemed inactive only upon written approval of the Department. An inactive source may not return to active status without written approval from the Department.

Emergency Source: any source of water used to supplement or temporarily replace a public water system's active or inactive source(s) when water of sufficient quality or quantity is not available. An emergency source may be placed on-line only after the Department's approval pursuant to a declaration of a state of water emergency under M.G.L. c. 1G § 15-17 or as a requirement of a Department administrative order.

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Abandoned Source (Formerly: Other): a source that is physically disconnected from a public water system and is no longer maintained as an active, inactive, or emergency source. Abandoned source(s) cannot be used as a public water supply source. A source may only be abandoned pursuant to 310 CMR 22.25.

Date of Meter Installation: Provide the date that the presently used source meter was installed.

Date Last Meter Calibration for this Source: Provide the most recent date that the meter for this source was calibrated.

Withdrawal Units (check one): Check whether you are reporting your withdrawal volume in gallons (GAL) or million gallons (MG).

Example: For March 2007 Well # 1 pumped 4,350,800 gallons.
If reported as GAL: 4,350,800
If reported as MG: 4.3508

Type of water metered for source: Raw or Finished

Total # of Days Pumped: Provide the total number of days in the year that this source was pumped for water supply.

Max. Single Day Pumped Volume: For each source, provide the highest one-day volume that was pumped during the year.

Date Max. Amount Pumped: Provide the date on which the above maximum one-day pumping occurred. If the maximum one-day pumping happened on multiple days, then provide the first date on which this occurred.

Total Amount Pumped: For each source, tally the monthly volumes to obtain the total amount of water pumped in the year.

Section F Watershed/Ground Water Inspection Report

Complete one section F for each protection area in your system. If you have two Zone IIs for your groundwater sources and one Watershed for a surface water source, then complete three separate copies of Section F.

1. Identify the protection area: Zone II, IWPA (Interim Wellhead Protection Area) for groundwater sources or Watershed (Zones A, B or C) for surface water sources. Watershed in Section F refers to the drainage area of the surface water source from which you withdraw water, not the major river basin in which the source is located.

   Enter the information for each source in the protection area inspected. If there are more than five sources in a protection area, attached additional sheets documenting source name and ID for all sources in the protection area. For each source enter the SOURCE ID: (e.g. 1234000-01G) and Source Name: (e.g. West Street Well).

2. Identify the current municipal protection for the Zone II / IWPA. Check with the Town/City Clerk for zoning bylaws/ordinances and general bylaws/ordinances, and with the Board of Health for their bylaws.

3. Identify and describe any land use activities that pose a threat to the drinking water quality.

4. Document if you identified violations of land use controls during your inspection(s). Describe any violations you identified, for example new or expanded hazardous waste generation, industrial wastewater discharges, underground storage tanks, etc. In addition to state regulated land uses (such as landfills, wastewater treatment plants, etc.) public water suppliers need to be familiar with the land uses and activities prohibited by the municipality. PWS should have a copy of their municipal zoning bylaws/ordinances, general bylaws/ordinances and health regulations on file.

5. Identify the wells by Source ID# for which you do not own the entire Zone I.